

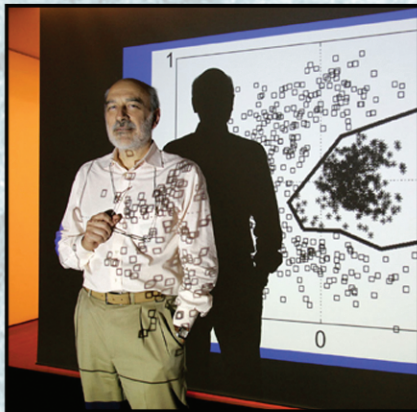
# *Announcing the 15th Annual* **Signal and Imaging Sciences Workshop**

**November 20 -21, 2008  
8:30 AM - 4:30 PM**

*at Lawrence Livermore National Laboratory, B482 Auditorium*

***OPEN to ALL  
LLNL Employees and Guests***

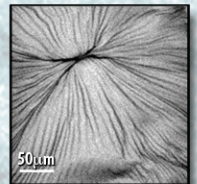
*Keynote Speaker (Thursday November 20th 9:00 AM ) is*



***Dr. Jose Principe, University of Florida  
Information Theoretic Signal Processing***

The background image was taken with the LLNL-developed dynamic transmission electron microscope (DTEM), which provides the highest resolution ever for imaging of ultrafast material processes. It shows a 15-ns exposure looking through a 151-nm-thick nanolaminate (six layers of Co/Al) that has undergone a highly exothermic, self-propagating reaction traveling at 6 m/s. The light and dark contrast zones depict rumpling of the film after the reaction front has passed, most likely due to volume expansion as the material changes phase from separate Al and Co to an intermetallic CoAl.

The DTEM developers were winners of an R&D 100 award with JEOL USA Inc. in 2008



*Image courtesy Judy Kim,  
Bill DeHope, Wayne King*

**For technical information:**

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Randy Roberts, Co-director, 925-423-9255, L-183**

**For registration and general information:**

**Carol Richardson, 925-423-7428, L-153, richardson3@llnl.gov**

*There is no registration fee for CASIS, however we request \$20 (\$10 per day) for hospitality and lunch.*



**Sponsored by the LLNL Engineering Directorate and the Center for Advanced Signal and Image Science (CASIS)**

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